

# U.S. Department of Transportation National Highway Traffic Safety

# **EXTERIOR TRUCK FORM**

National Automotive Sampling System Crash Causation Special Study

Adn	ninistration	EXTERIOR	TRUCK FORM Crash Causation Special Study
1.	Primary Sampling Unit Number		12. Vehicle Configuration
2.	Year		1 2 3 4 5 6 7 8 9 10
2	Casa Namahan Staatama		Left justify (-) No additional units
3.	Case Number - Stratum		(R) Straight truck
4.	Vehicle Number		(T) Tractor
ч.	venicie ivanioci		(S) Semi-trailer
	VEHICLE IDENTIFICATION		(F) Full trailer
5.	Power Unit Type		(G) Gooseneck hitch
٥.	(1) Straight Truck		(O) Other trailer (specify):
	(2) Tractor		(U) Unknown trailer type
	(8) Other (specify)::		(A) A dolly
	(9) Unknown		(B) B train
			(C) C dolly
6.	Power Unit Vehicle Identification Number (VIN)		(X) Unknown dolly
	$\frac{1}{1}$ $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{6}$ $\frac{1}{7}$ $\frac{1}{8}$ $\frac{1}{9}$ $\frac{1}{10}$ $\frac{1}{11}$ $\frac{1}{12}$ $\frac{1}{13}$ $\frac{1}{14}$	15 16 17	(J) Jeep
		15 16 1/	(P) Bus
	Left justify; Slash zeros and letter Z (0 and Z) No VIN — Code all zeros		(I) Implement of husbandry
	NO VIN — Code all zelos		13. Total Number Of Trailers
7.	Cab Style		Code actual value
/.	(1) Conventional		(0) None (includes bobtail tractor)
	(2) Cab-over-engine		(7) Not applicable (includes straight truck)
	(3) Cab forward		(9) Unknown
	(8) Other (specify):		
	(9) Unknown		Number Of Axles In Use
			14. Power Unit
8.	Sleeper Berth		15. First Trailer
	(1) Yes		16. Second Trailer
	(2) No		17. Third Trailer
	(9) Unknown		Code number of axles
0	D 1 D.		(97) Not applicable (includes no trailer)
9.	Dromedary Box (1) Yes		(99) Unknown
	(1) 1 es (2) No		Number Of Lift Axles (Not in Use)
	(3) Unknown		18. Power Unit
	(3) Childio Wii		19. First Trailer
10.	ITS Equipment Installed		20. Second Trailer
	(Code up to three units.)		21. Third Trailer
	(1) Headway detection unit		Code number of axles
	(2) Side/object detection unit		(97) Not applicable (includes no trailer)
	(3) Rollover warning unit		(99) Unknown
	(7) Not applicable		Number Of Steen Anley Coal Alexander Park
	(8) Other (specify):(9) Unknown	<del></del>	Number Of Steer Axles (includes self-aligning steer axles) 22. Power Unit
	(3) CHKHUWH		23. First Trailer
11	Engine Control/Data Recorder Installed		24. Second Trailer
11.	(1) Yes (specify type):		25. Third Trailer
	( ) (		Code number of steer axles
	(2) No		(97) Not applicable (includes no trailer)
	(9) Unknown		(99) Unknown
	If installed, record the following data:		
	Engine RPM (9997) Not applicable		Trailer Type
	(9997) Not applicable		26. First Trailer
	(9999) Unknown	V DI I	27. Second Trailer
	Vehicle Speed mph x = 1.6093	NTII VDU	28. Third Trailer
	(9997) Not applicable	кгп	(1) Semi (2) Full
	(9999) Unknown		(7) Not applicable (includes no trailer)
	Gear Position (specify):		(8) Other (specify):
			(9) Unknown

VEHICLE IDENTIFICATION	Constitution of the Consti
Trailer Make 29. First Trailer	Gross Vehicle Weight Rating (GVWR) 45. Power Unit 0
30. Second Trailer	45. Power Unit
31. Third Trailer	47. Second Trailer
Record specific make	48. Third Trailer
(97) Not applicable (includes no trailer) (99) Unknown	Code GVWR to nearest 10 kilograms
(99) Unknown	(0000) Less than 5 kilograms (9997) Not applicable
Trailer Model Year	(9999) Unknown
32. First Trailer	
33. Second Trailer	Power Unit
34. Third Trailer  Code all four digits of the model year	,, lbsx.4536=, kgs
(9999) Unknown	
(5575) Cimila III	Second Trailer
Trailer VIN	, lbsx.4536=, kgs
35. First Trailer VIN	Third Trailer
$\frac{1}{1}$ $\frac{2}{2}$ $\frac{3}{3}$ $\frac{4}{4}$ $\frac{5}{5}$ $\frac{6}{6}$ $\frac{7}{7}$ $\frac{8}{9}$ $\frac{9}{10}$ $\frac{11}{11}$ $\frac{12}{12}$ $\frac{13}{14}$ $\frac{14}{15}$ $\frac{16}{16}$ $\frac{17}{17}$	,lbsx.4536=,kgs
1 2 3 4 3 0 7 6 7 10 11 12 13 14 13 10 17	Empty Weight
36. Second Trailer VIN	49. Power Unit
	50. First Trailer
$\frac{1}{1}  \frac{2}{2}  \frac{3}{3}  \frac{4}{4}  \frac{5}{5}  \frac{6}{6}  \frac{7}{7}  \frac{8}{8}  \frac{9}{9}  \frac{10}{10}  \frac{11}{12}  \frac{12}{13}  \frac{14}{15}  \frac{15}{16}  \frac{17}{17}$	51. Second Trailer
37. Third Trailer VIN	52. Third Trailer, 0 53. Total empty weight, 0
57. Time franci viiv	Code empty weight to nearest 10 kilograms
$\overline{1}$ $\overline{2}$ $\overline{3}$ $\overline{4}$ $\overline{5}$ $\overline{6}$ $\overline{7}$ $\overline{8}$ $\overline{9}$ $\overline{10}$ $\overline{11}$ $\overline{12}$ $\overline{13}$ $\overline{14}$ $\overline{15}$ $\overline{16}$ $\overline{17}$	(0000) Less than 5 kilograms
Left justify: slash zeros and letter z (0 and z)	(9997) Not applicable
No trailer – code all zeros	(9999) Unknown
No VIN tag – code all nines	Power Unit
Trailer Date of Manufacture	, lbs x .4536 =, kgs
38. First Trailer	
39. Second Trailer	First Trailer
40. Third Trailer	,, lbs x .4536 =,kgs
No trailer – code all zeros	Second Trailer
Unknown – code all nines	, lbs x .4536 =, kgs
Body Style 41. Power Unit	Third Trailer, lbs x .4536 =, kgs
42 First Trailer	, lbs x .4536 =, kgs
43. Second Trailer	,, lbs x .4536 =, kgs
44. Third Trailer	
(01) Van	Vehicle Length
<ul><li>(02) Open top van</li><li>(03) Refrigerated van</li></ul>	54. Power Unit m m m
(04) Livestock carrier	55. First Trailer       m         56. Second Trailer       m
(05) Flatbed	57. Third Trailer m
(06) Low boy	58. Total Length m
<ul><li>(07) Flatbed with equipment</li><li>(08) Flatbed with sides</li></ul>	Code length to the nearest tenth of a meter. (000) Less than 0.1 meters
(09) Pole/logging	(000) Less than 0.1 meters (997) Not applicable
(10) Tank-liquid	(999) Unknown
(11) Tank-compressed gas	
(12) Tank-dry bulk	Power Unit
(13) Auto carrier (14) Dump	, ft. x .3048 = m
(14) Dump (15) Bottom dump/hopper bottom	First Trailer
(16) Garbage/refuse	ft. x .3048 = m
(17) Cement Mixer	
(18) Other (specify):	Second Trailer
<ul><li>(97) Not applicable (includes tractor power unit)</li><li>(99) Unknown</li></ul>	,, ft. x .3048 = m
(22) CHKHOWH	

lbsx.4536= \_\_\_\_ , \_\_\_\_ , \_\_\_\_ \_\_\_

lbsx.4536= \_\_\_\_ , \_\_\_ \_\_\_

lbsx.4536= \_\_\_\_ , \_\_\_\_ \_\_\_

First Trailer

Second Trailer

Third Trailer

68. Power Unit 69. First Trailer 70. Second Trailer

**Percent Of Cargo Capacity** 

Page	3

71. Third Tra	iler or solids, code percent of space occupied
(00) Em	pty
	applicable (includes tractor power unit)
(99) Unl	known
	or liquid loads code percent of tank volume occupied. ort following data:
Tank capa	acity:
First traile Second tra	·
Third trai	ler1
Tank Load	
First traile Second tra	
Third trai	
Capacity	
First traile	er gal x 3.785 =
Second tra	ailer
	gal x 3.785 =
Third trai	
	gal x 3.785 =1
Load First traile	er
	1 2 705
Second tra	
	gal x 3.785 =1
Third trai	gal x 3.785 =
Hazardous Ca	
72. Power Un 73. First Trail	
74. Second Tr	railer
75. Third Train (1) Yes	
(2) No	
(7) Not a (9) Unkr	applicable (includes tractor power unit) nown
Cargo Spillag	e
76. Power Un	it
78. Second Tr	railer
79. Third Train	
(0) No sy (1) Non-	pniage hazardous spillage
(2) Haza	rdous spillage
	applicable (includes tractor power unit)

## **LOCATOR**

Locate the end of the damage	with respect to the	vehicle's damaged	center point or	bumper corner	for end impacts of	or an undamaged	axle for side
impacts/							

Specific Impact No.	<b>Location of Direct Damage</b>	Location of Field L	Location of Max Crush		

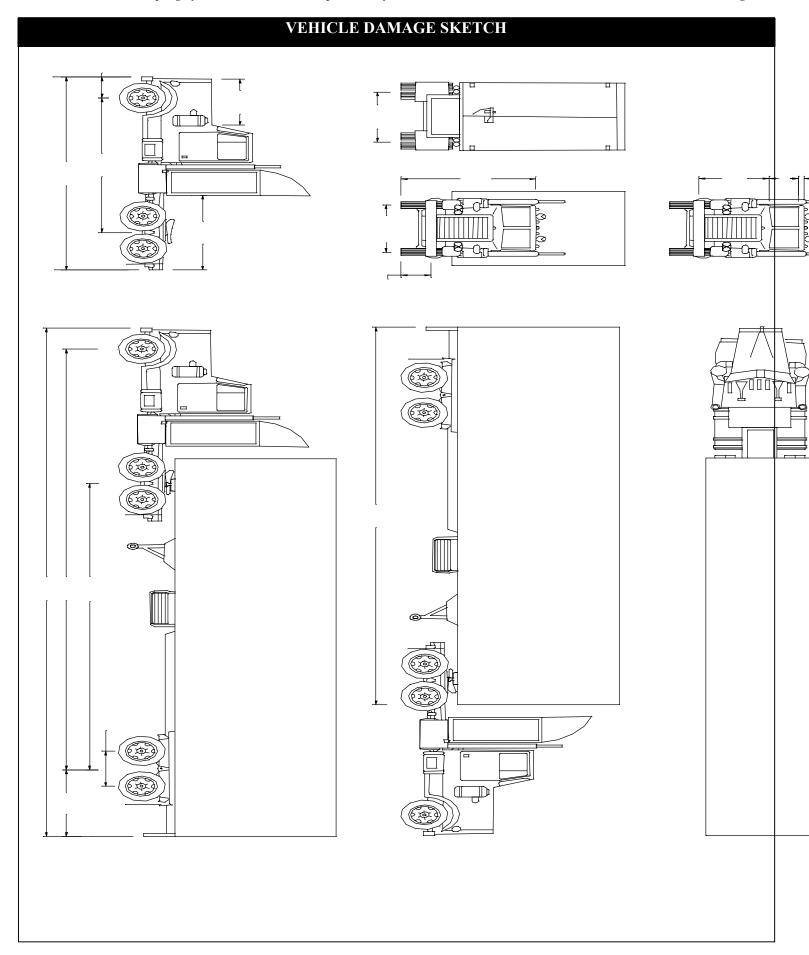
# **CRUSH PROFILE IN CENTIMETERS**

NOTES: Identify the plane at which the measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

I	Use as many mies/cor	Direct 1	Damage	Serie caci	tummgv p.v.mv.
Specific Impact	Plane of Impact C-Measurements	Width (CDC)	Max Crush	Field L	Damage Inspection Notes:
Impact Number		, ,			
T					



# VEHICLE DAMAGE SKETCH

124.

				IDC	C WORKSI							
				CODES FO	OR OBJECT CO	ONTACTED						
01-30	- Vehicle	Number			(57) Fence							
					(58)	Wall						
	ollision	D.11 /E .1	1 F. 10	F., 4)	`	(59) Building						
(31)		- Rollover (Excl	udes End-Over-	Ena)	(60)	Ditch or Culvert Ground						
(32) (33)	Fire or E	-End-Over-End			(61) (62)	Fire Hydrant						
(34)	Jackknife				(63)	Curb						
(35)		traunit Damage (S	Specify):		(64)	Bridge						
					(68)	Other Fixed Obje	ct (Specify):					
(36) (38)		sion Injury oncollision (Spec	ify):		(69)	Unknown Fixed O	Object					
(39)	Other No	oncollision - Deta	ils Unknown		Collis	ion With Nonfixe	d Object					
Collis	sion With	Fixed Object			(70)	Passenger Car, Li Not In-Transport	ght Truck, Van,	or Other Vehicle	;			
(41)		0cm in diameter	)		(71)	Medium/Heavy T	ruck or Bus No	t In-Transport				
(42)		0 cm in diameter			· /	Pedestrian	ruck of Bus Ivo	i in Transport				
(43)		ry or Bush	.,			Cyclist or Cycle						
(44)	Embankr				(74)	Other Nonmotoris	st or Conveyanc	e				
(45)	Breakaw	ay Pole or Post (A	Any Diameter)		,		,					
					(75)	Vehicle Occupant	t					
		Pole or Post			(76)	Animal						
		Post ( $\leq 10$ cm in $c$			(77)	) Train						
(51)		Post (> 10 cm but		neter)	(78)							
(52)		Post (> 30 cm in c			(79)							
(53)		Post (diameter unl	known)		(88)	Other Nonfixed C	Object (Specify):	•				
(54)		Traffic Barrier			(00)		. 1.01.14					
(55)		Attenuator			(89)	Unknown Nonfix						
(56)		affic Barrier (incl			(98)	Other Event (Spe	city):					
	(Specify)	):			(99)	Unknown Event	or Object					
			DEFO	ORMATION CLA	ASSIFICATION	BY EVENT NUN	ИBER					
						(4)	(5)					
		Crash Event	Object	(1) (2)	(3)	Specific	Specific	(6)				
		Sequence	Contacted			Longitudinal			(7)			
		Number		Force	Location	or Lateral	Lateral	Damage	Deformation			
1	15.					Location	Location	Distribution	Extent			
	16.											
1	17.											
1	18.											
1	19.											
1	20.											
1	21.											
1	22.											
1	22											

# National Automotive Sampling System - Crash Causation Special Study: Exterior Truck Form Page 9 NOTE: COMPLETE THIS PAGE FOR REAR AND SIDE IMPACTS ONLY. RIGHT OR LEFT VIEW REAR VIEW Front Rear **├**─Т--Truck bumper height above Front axle setback Нв As ground D Front tire diameter

# LEVEL 1 INSPECTION RESULTS

	MDC	MIRNI	r coi		EL I INSPECTI	ON RESULTS					
DRIVER/CC	DMIPC	NEN.	Out		IANCE				Out	t-of-	
Driver Check	Vio	lation	Ser		Disposition	1 <sup>st</sup> Towed Unit	Viola	ition		vice	Disposition
Differ Check	Y	N	Y	N	Code	1 Towed Onit	Y	N	Y	N	Code
Seat belts	1	11	1	11	Couc	Coupling devices	<u> </u>	- 1 1		- 11	Code
No log						Header boards					
Log not current						Mrkr/clear lights/tail					
False log						Tires					
10 hr. rule						Wheels/lugs/rims					
15 hr. rule						Brakes					
60/7 rule						Air hoses/leaks					
70/8 rule						Frames					
Medical certification						Suspensions					
Other medical						Wiring					
Under age						Turn signals					
Driver qualifications						Stop signals					
License opr/chauff/cdl						Mud flaps					
Other driver reg.						Rear end prot.					
		l	Out	-of-		Cargo securement					
Power Unit	Vio	lation	Ser		Disposition	Tarping required					
1 OWCI OIII	Y	N	Y	N	Code	Other violations					
Heater/defroster	1	11	1	- 11	Couc	Other violations			Out	t-of-	
Horn/speedometer	1					2 <sup>nd</sup> Towed Unit	Viola	ition		vice	Disposition
Cab floor						- 2 Towed out	Y	N	Y	N	Code
Wiring						Coupling devices	1	11	1	11	Code
Fire extinguisher						Mrkr/clear lights/tail					
Warning devices/flags/flares						Tires					
Brake applied/pressure loss						Wheels/lugs/rims					
Low air warning						Brakes					
Parking brake						Air hoses/leaks					
Glass						Frames					
Windshield wipers/washers						Suspensions					
Headlights						Wiring					
Front turn signals						Turn signals					
Clear/id lights/tail						Stop signals					
Steering tires						Mud flaps					
Front wheels/lugs/rims						Rear end prot.					
Steering components						Cargo securement					
Front brakes						Tarping required					
Rearview mirrors						1 5 1					
Fuel system						Other violations			0	t-of-	
Battery installation						3 <sup>rd</sup> Towed Unit	3.71.1.	45			Di
Exhaust system						3 Towed Unit	Viola Y		Ser Y	vice	Disposition
Air hoses/leaks						Continue to tone	Y	N	Y	N	Codes
						Coupling devices					
Tires Wheels/lugs/rims	1		-	-		Mrkr/clear lights/tail	+				
	1			-	<del> </del>	Tires	+	-			
Brakes Suspensions	1		1			Wheels/lugs/rims	1	-			
Suspensions Frames	1					Brakes	+	-			
	1					Air hoses/leaks	+	-			
Coupling devices	1		-			Frames	+				
Rear turn signals	1			<u> </u>	1	Suspensions	+	-			
Stop lamps	ļ			<u> </u>	1	Wiring	+				
Mud flaps	<del>                                     </del>			<u> </u>		Turn signals	+				
Rear end prot.	1		ļ			Stop signals	1				
Cargo securement	<u> </u>		ļ			Mud flaps	1				
Tarping required	1		1			Rear end prot.	1				
Other violations	1		1			Cargo securement	1				
						Tarping required					
						Other violations					
	<u> </u>										
						<b>.</b>					

	DISPOSITION CODES	
(1)	Renaired at Scene	
(1) (2)	Repaired at Scene Towed/Escorted Other (Specify): Not applicable Unknown	
(3) (8) (9)	Other (Specify):	
(9)	Unknown	

National .	Automotive	e Samplin	g Syste	m - Crasl	ı Causat	ion Spec	ial Study	: Exterior Truck				Page 11
							SYSTEM TYPE: (1) Air (3) Electric					
		BRAK	KE INS	PECTION	V	(2) Hydraulic (9) Unknown						
		AB	S	AI	3S	Adi	uster			oke	Stroke	Length
Axle	System	Insta		Funct			vpe	Chamber		ype		8
Position	Type	Y	N	Y	N	Man	Auto	Size	Long	Short	Left	Right
1	- Jpc	-	- 1			112442	11440	5220	Long	511011	2010	- Ing.iv
-												
2												
_												
3												
4												
5												
6												
7												
,												
8												
9												
10												
1.0												
11									1			
12									1			1
1.2												
		ADJUS	STMEN	NT CODE	S			Brake Inspectio	n Notes:	ı	l	1
		ADOUL			0			Diake inspection	11 1 10103.			

Chamber Size (00.00) N (13.34 - 20.56) (97.97) (99.99)	Not Examined Range of Applicable Outside Diameters in cm. Not applicable Unknown
Stroke Type (0) (√) (7) (9)	Not Examined Use Checkmark to Indicate Stroke Type Not applicable Unknown
Stroke Length (0.00) (3.49 - 7.62) (7.77) (9.99)	Not Examined Range of Applicable Stroke Lengths in cm. Not applicable Unknown

HAZ	ARDOUS	S MATI	ERIAL	S	·
				ıt-of	
Inspection Item	Examined		Service		Disposition
	Y	N	Y	N	
Ship paper/manifest (HA)					
HM license (HB)					
HW registration (HC)					
Placards( HD)					
Packaging (HE)					
Markings (HF)					
Labels (HG)					
Loading/securement HH)					
Cargo/portable tanks (HI)					
Safety equipment (HJ)					
Not applicable					
(Inspection not required)					
	Reportable				
		Quantity?		iver?	
CODES	Y	N	Y	N	
HAZAR	DOUS M	ATEDI	ATST	VDF	

- (A) 1.1 (Explosives)
- (B) 1.2 (Explosives)
- (C) 1.3 (Explosives)
- (D) 1.4 (Explosives)
- (E) 1.5 (Explosives)
- (F) 1.6 (Explosives)
- (G) 2.1 (Flammable Gas)
- 2.2 (H) (Non-Flammable Gas)
- 2.3 (Poison Gas) (I)
- 3 (Flammable Liquid) (J)
- (K) 4.1 (Flammable Solid)
- 4.2 (L) (Spontaneous Combustion)
- 4.3 (Dangerous Wet) (M)
- 5.1 (Oxidizer (N)
- (O) 5.2 (Org. Perox.)
- (P) 6.1 (Poi. PG I & II)
- (Q) 6.1 Poi. PG III)
- (R) 6.2 (Infectious Substance)
- (S) 7 (Radioactive)
- 8 (T) (Corrosive)
- (U) (Miscellaneous)
- (V) (Combustible Liquid)
- (W) (ORM-D)
- (X) (Other)
- (Z)(Not applicable)